

Work Order ID 103471-2

June-24-13 1:56:21 PM

103471

Page 1

Item ID: D3294-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket for Interior Window for -115

Start Date: 6/24/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 7/05/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: MLJDate: 13-06-26

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3294

D

100

0.00

100

Waterjet

Memo

0.00

FLOW CNC Waterjet

2024.080

1-Cut as per Dwg D3294

CUt File D3294-3

Dwg Rev: 0Prog Rev: 0

*grain direction on a 45 deg as per dwg**

2-Deburr if necessary

12 0 JMB-07-20

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

12 0 JMB-07-20

Work Order ID 103471

103471

Page 2

June-24-13 1:56:21 PM

Item ID: D3294-1 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket for Interior Window for -115

Start Date: 6/24/13 Start Qty: 12,00 *12*
 Required Date: 7/05/13 Req'd Qty: 12.00 *12*

Cust Item ID:
 Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00				12			
120									
QC	Memo	0.00							
Quality Control									
130		0.00							
130						12			
Brake NC	Memo	0.00							
Brake NC	1-Deburr if necessary 2-Bend as per Dwg D3294 (Ensure angle is correct)								
140	QC5- Inspect part completeness to step on W/O	0.00				12			
140									
QC	Memo	0.00							
Quality Control									

SB
 13/07/22

Work Order ID 103471

103471

Page 3

June-24-13 1:56:21 PM

Item ID: D3294-1 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket for Interior Window for -115
 Start Date: 6/24/13 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 7/05/13 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Chemical Conversion Coat per QSI005 4.1	0.00				12		13.726	
150									
HandFinish	Memo	0.00							
Hand Finishing									
160	QC7-Inspect Chemical Conversion Coat	0.00				12x			6/24/13
160									
QC	Memo	0.00							
Quality Control									
170		0.00				2x			6/24/13
170									
Small Fab	Memo	0.00							
Small Fab	1-Install D3294-5 doubler to D3294-3 bracket with rivets as per dwg. D3294								

Work Order ID 103471

103471

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June-24-13 1:56:21 PM

Item ID: D3294-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket for Interior Window for -115

Start Date: 6/24/13

Start Qty: 12.00

12

Cust Item ID:

Required Date: 7/05/13

Req'd Qty: 12.00

12

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

Quality Control

② 13-10-02

DA
09
2-89

190

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

190

Powdercoat

Powder Coating

Memo

Start Time:

Oven Temperature:

Finish Time:

0.00

200

QC3- Inspect Part Finish

0.00

200

QC

Memo

0.00

Quality Control

2x PM 13/10/02

2x d ll 13/10/02

m 112338

2:00
3200 F
2:30

Work Order ID 103471

103471

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June-24-13 1:56:21 PM

Item ID: D3294-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket for Interior Window for -115

Start Date: 6/24/13 Start Qty: 12.00 *12*

Cust Item ID:

Required Date: 7/05/13 Req'd Qty: 12.00 *12*

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Identify as per dwg & Stock Location: <u>ST212</u>	0.00							
210									
Packaging	Memo	0.00							
Packaging									
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.00							
Quality Control									

2X 13-10-3

13-10-7
MCS 13-09-27

Picklist Print

June-24-13 1:56:21 PM

Page 1

Work Order ID: 103471
 Parent Item: D3294-1
 Parent Item Name: Bracket for Interior Window for -115

Start Date: 6/24/13
 Start Qty: 12.00

Required Date: 7/05/13
 Required Qty: 12.00

Comments: IPP A04.08.24New issueKJ/JLM
 IPP Rev:B Now On Waterjet 07-03-26 JLM
 IPP Rev:C 08-07-16 Redesign part DD verified by:EC
 IPP Rev:D 08-10-06 revB as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.080 2024-T3 .080 sheet		Purchased	No			100	sf	53.6700	1.8	22.736842 34			Jm13-07-20
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT022		53.67							
				123217		27.75							
				125636		25.92							
D3294-5 Doubler		Manufactured	No			170	Each	2.0000	1	12			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		2							
				90097		2							
MS20470AD4-5 RIVET, UNIVERSAL HEAD		Purchased	No			170	Each	2,157.0000	15	180			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		218							
				122452		218							
				ST336		1939							
				122452		584							
				125654		1355							

Handwritten notes and signatures:
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 B/04568
 B/02126 (10x)
 M126926
 105x
 75

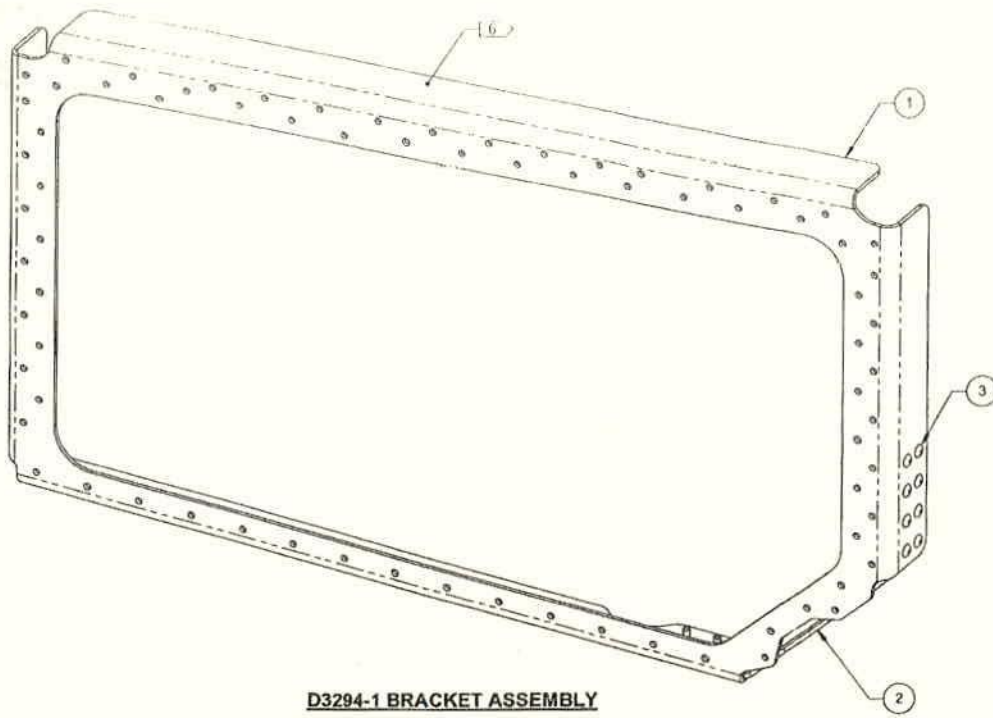
DART AEROSPACE LTD		Work Order:	103471
Description: Bracket Assembly		Part Number:	D3294-1
Inspection Dwg: D3294	Rev: D	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	0.129"	-		✓	Jkma1
Ø0.141	+0.005/-0.001	0.141"	-		✓	
6.708	+/-0.010	6.708"	-		✓	
1.118	+/-0.010	1.119"	-		✓	
5.590	+/-0.010	5.590"	-		✓	
1.118	+/-0.010	1.117"	-		✓	
13.563	+/-0.010	13.563"	-		T	Jkma6
1.043	+/-0.010	1.050"	-		✓	
0.625	+/-0.010	0.628"	-		✓	
0.325	+/-0.010	0.326"	-		✓	
0.300	+/-0.010	0.303"	-		✓	
0.400	+/-0.010	0.401"	-		✓	
6.000	+/-0.010	6.002"	-		✓	
1.000	+/-0.010	1.003"	-		✓	
17.124	+/-0.010	17.124"	-		T	
16.13	+/-0.030	16.13"	✓		T	
7.27	+/-0.030	7.274"	-		✓	
11.97	+/-0.030	11.97"	-		✓	Production
8.37	+/-0.030	8.378"	-			
20.05	+/-0.030	20.05"	-			
12.98	+/-0.030	12.98"	-			
14.59	+/-0.030	14.59"	-			
11.66	+/-0.030	11.66"	-			
0.080	+/-0.010	0.081"	-			

Measured by:	Jm	Audited by:	DAJ 27	Preliminary Approval:	
Date:	13-07-20	Date:	13-7-20	Date:	

Rev	Date	Change	Revised by	Approved
A	04.08.24	New Issue	KJ/JLM	
B	06.03.09	Dimension 12.97 was 13.03	KJ/JLM	
C	08.11.27	Dimensions updated per Dwg Rev B	KJ/EC	
D	09.07.29	Dimension 2.100 was 2.072	KJ	
E	09.09.14	Dimensions updated per Dwg Rev C	KJ	
F	13.05.08	Dwg Rev updated	KJ	



D3294-1 BRACKET ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3294-1" PER DART QSI 044 6.1
- 7) WEIGHT: 0.83 lbs

QTY	P/N	DESCRIPTION
1	D3294-1	BRACKET ASSEMBLY
1	D3294-3	BRACKET
1	D3294-5	BRACKET
15	MS20470A04-5	SCREW

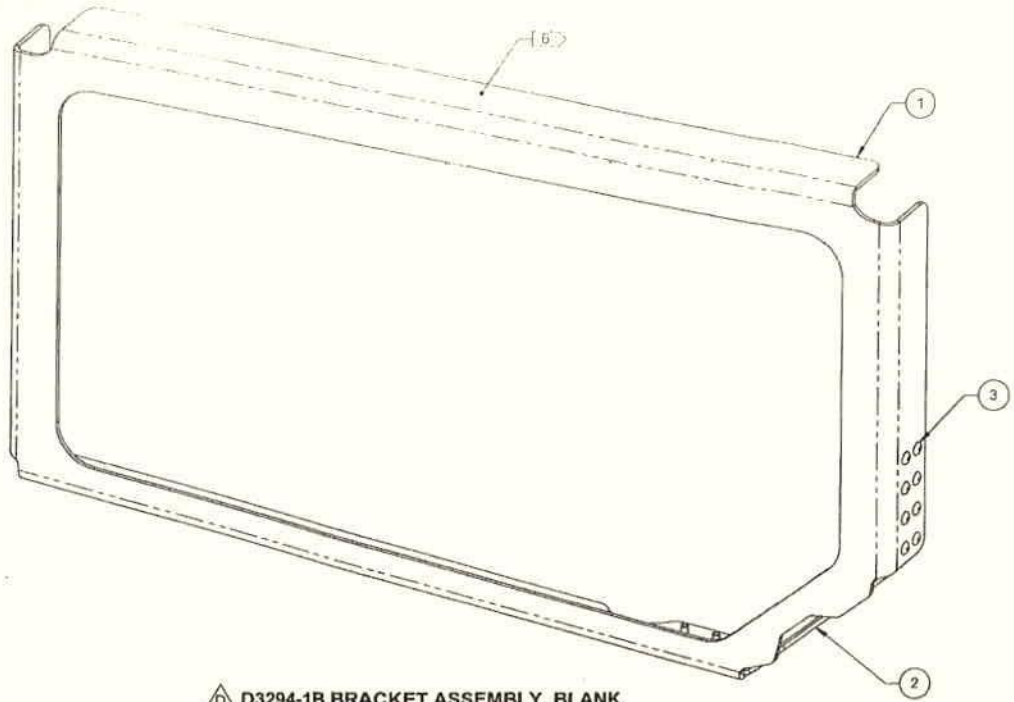
103471 MJS
1306-26

RELEASED
2012-11-21

REV.	DESCRIPTION	BY	DATE
D	ADD D3294-1B/3B/3FB. REASON: PAR12-223.	MB	12.11.15
C	REMOVE FLANGE PREVIOUSLY ADDED. ADD -5 DOUBLER ZN A4-1, SHEET 5+6	HS	09.03.24
B	CHANGE FLANGE FROM OUTSIDE TO INSIDE, ZN B4-1, C3-2. CHANGE GRAIN DIRECTION, ZN C4-7	HS	08.09.22
A	NEW ISSUE	CP	04.08.28
DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	DART AEROSPACE LTD		
CHECKED	DART AEROSPACE LTD		
MFG. APPR.	DART AEROSPACE LTD		
APPROVED	DART AEROSPACE LTD		
DE APPR.	DART AEROSPACE LTD		
DATE	12.11.15	REV. D SHEET 1 OF 9 SCALE NTS	

103471

QTY	P/N	DESCRIPTION
1	D3294-1B	BRACKET ASSEMBLY, BLANK
1	D3294-1B	
1	D3294-1B	
1	D3294-1B	



D3294-1B BRACKET ASSEMBLY, BLANK

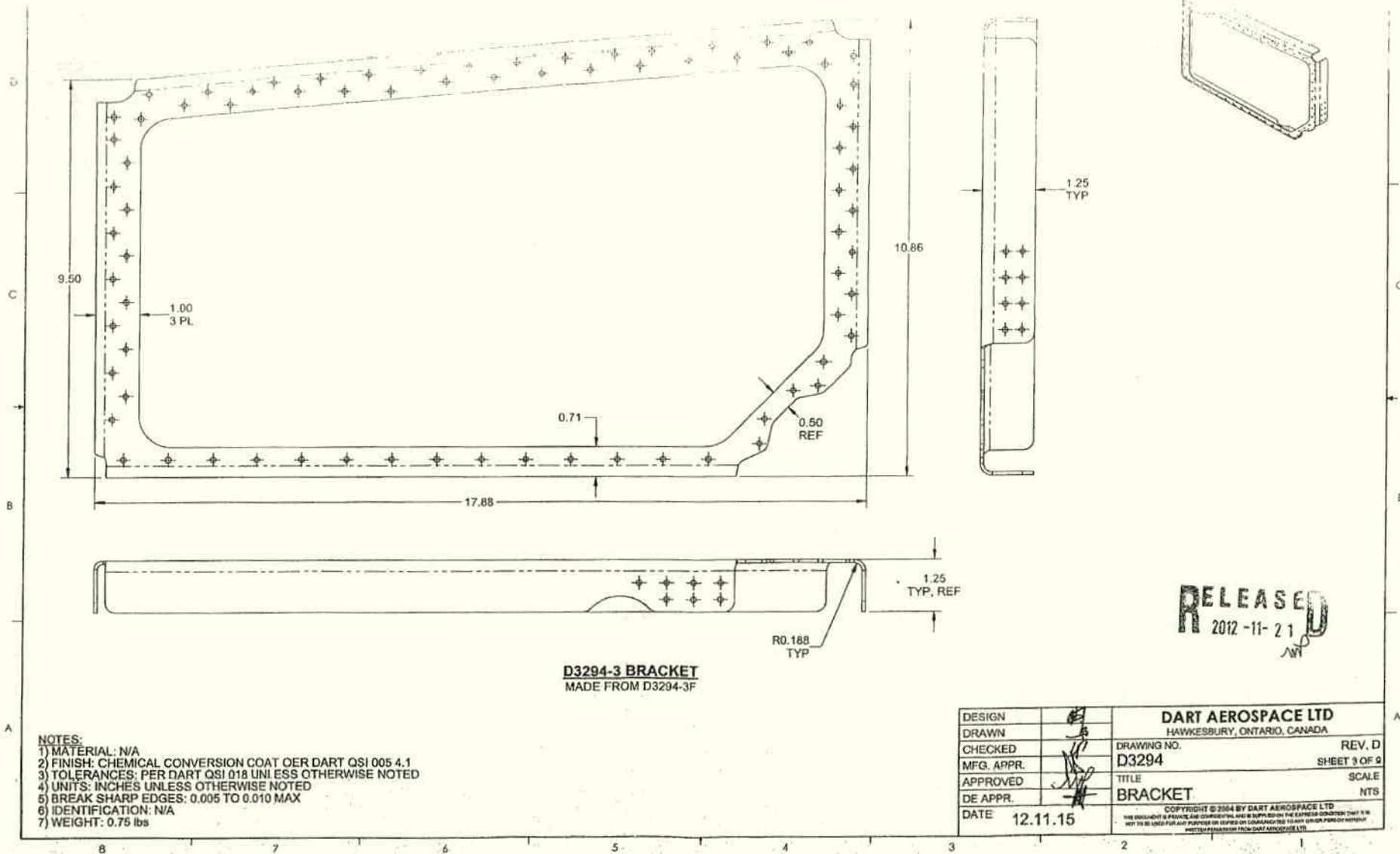
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2012-11-21

NOTES:

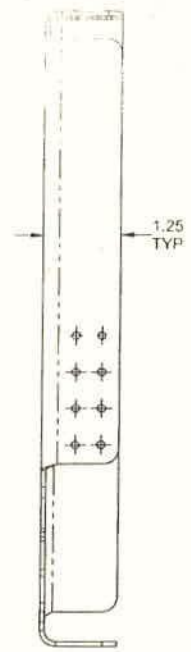
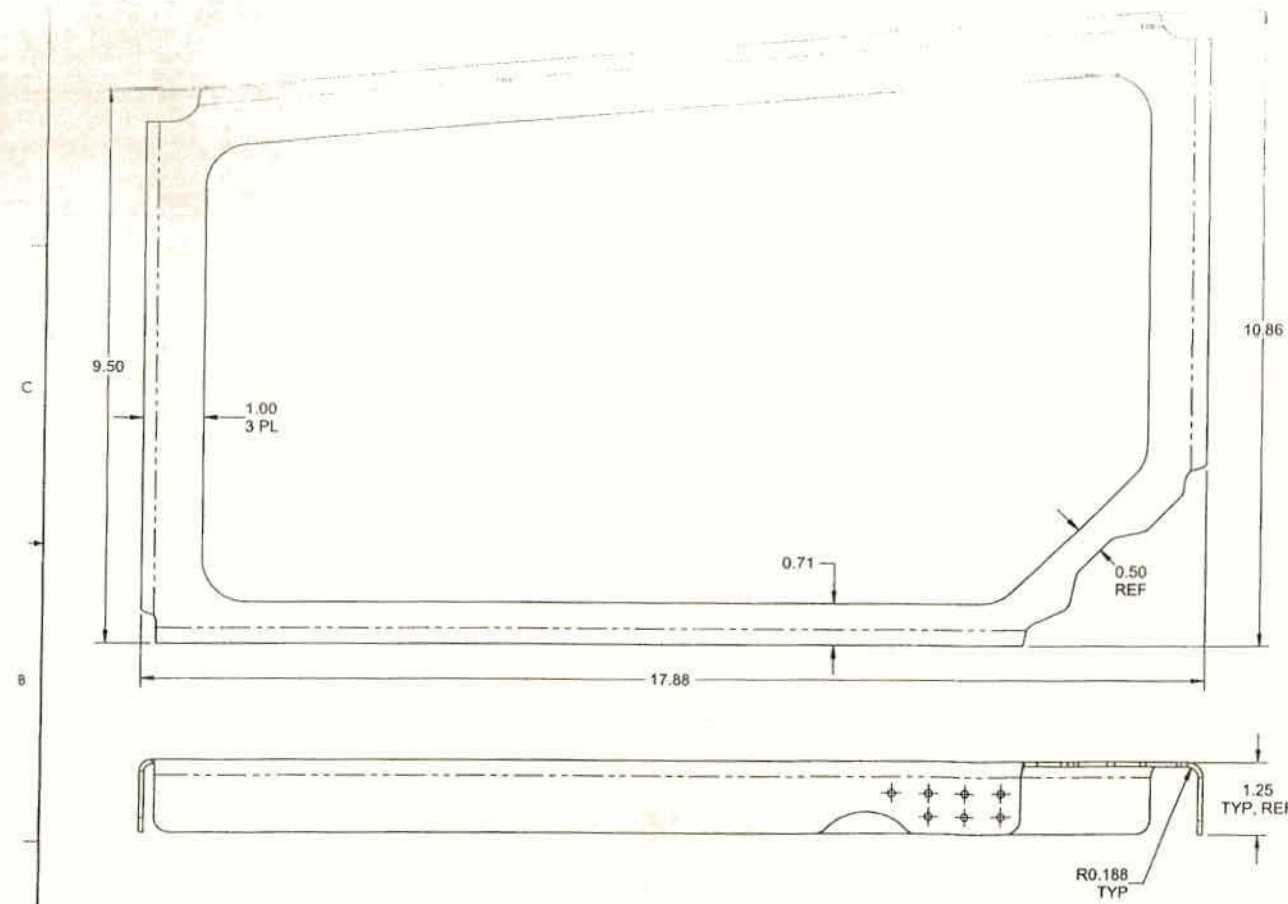
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDEXT" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3294-1B" PER DART QSI 044 6.1
- 7) WEIGHT: 0.83 lbs

DESIGN		DART AEROSPACE LTD
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MFG. APPR.		D3294 SHEET 2 OF 9
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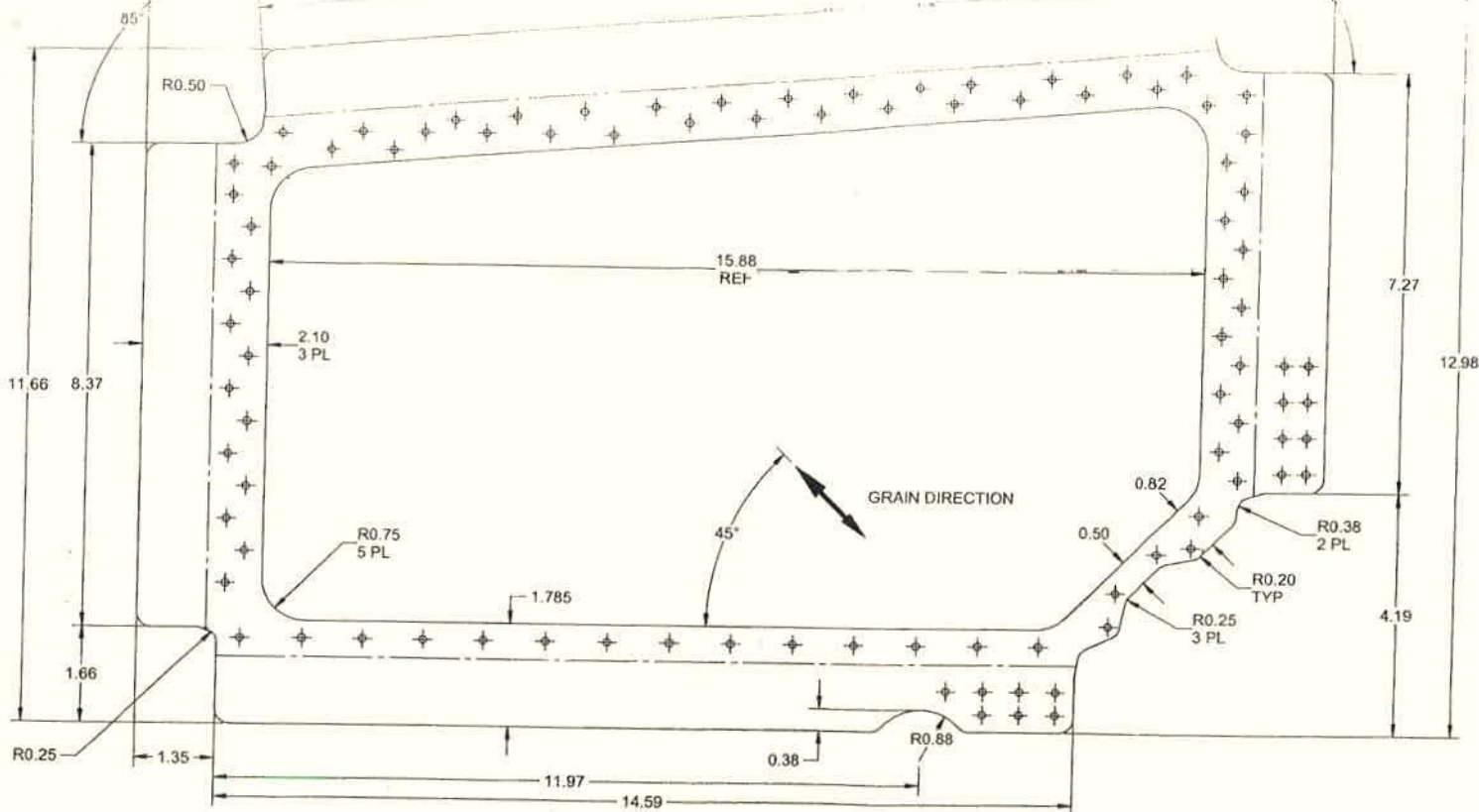


D3294-3B BRACKET
MADE FROM D3294-3BF

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT OER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.76 lbs

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D3294-3F BRACKET FLAT PATTERN

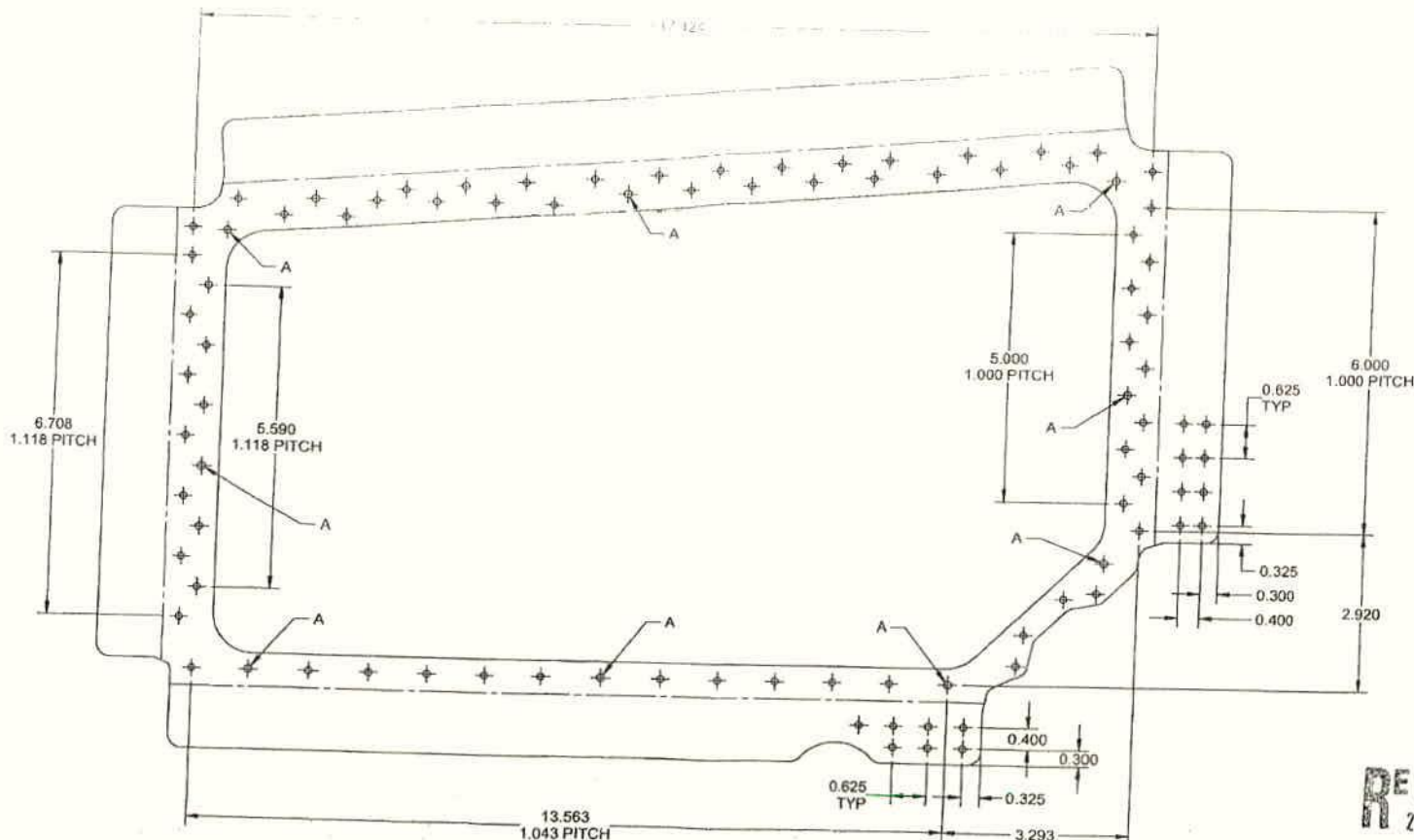
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2012-11-21

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.080 THICK, PER AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 (REF DART SPEC M2024T3S.080)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.75 lbs

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MFG. APPR.		D3294	SHEET 5 OF 9
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10347



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2012-11-21

LABEL	HOLE Ø
ALL HOLES UNLESS NOTED	0.129
A	0.141

D3294-3F BRACKET FLAT PATTERN
SUPPLEMENTAL VIEW

DESIGN	
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DE APPR.	
DATE	12.11.15

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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16 13

85°

R0.50

11.66

8.37

2.10

3 PL

15.88

REF

7.27

95

0.400

0.300

0.625

TYP

0.325

12.98

0.82

0.50

45°

GRAIN DIRECTION

R0.75

5 PL

1.785

Ø0.129

15 PL

0.625

TYP

R0.38

2 PL

R0.20

TYP

R0.25

3 PL

4.19

1.66

R0.25

1.35

11.97

14.59

0.38

R0.88

0.300

0.400

0.325

0.080

REF

D3294-3BF BRACKET FLAT PATTERN, BLANK

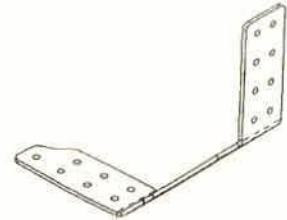
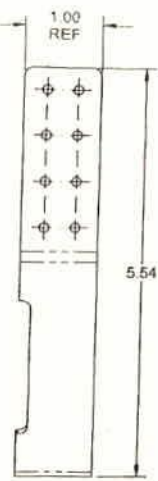
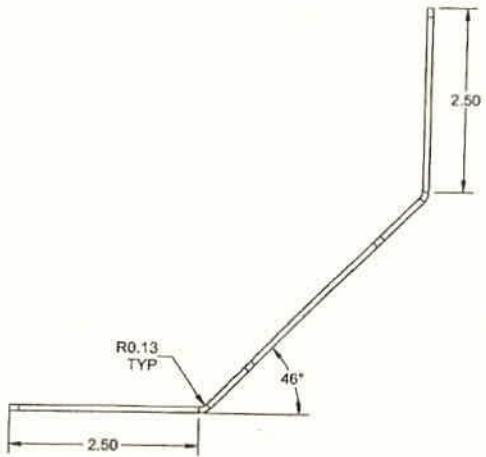
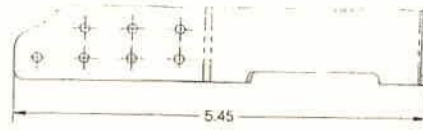
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D3294-3BF BRACKET FLAT PATTERN, BLANK

- NOTES:
1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.080 THICK, PER AMS-QQ-A-250/4
OR AMS 4037 OR ASTM B209 (REF DART SPEC M2024T3S.080)
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 015 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.75 lbs

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APPROVED			
DE APPR.			
DATE 12.11.15			

10347

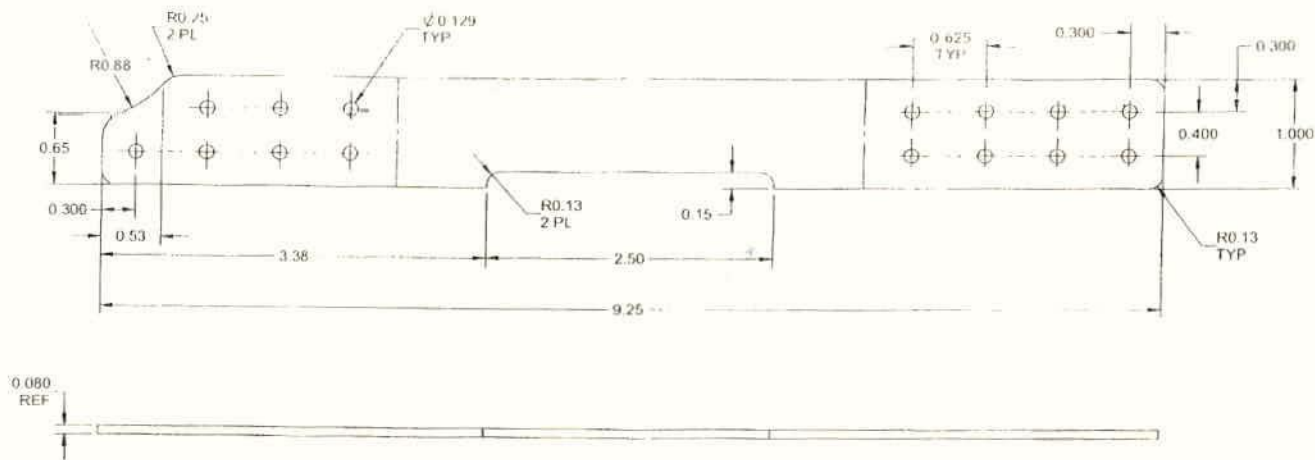


D3294-5 DOUBLER
MADE FROM D3294-5F

RELEASED
2012-11-21

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.07 lbs

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D3294-5F DOUBLER FLAT-PATTERN

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2012-11-21

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.080 THICK, PER AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 (REF DART SPEC M2024T3S.080)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.07 lbs

DESIGN		DART AEROSPACE LTD	
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